ICHTHYOLOGY.—Emmelichthyops atlanticus, a new genus and species of fish (family Emmelichthyidae) from the Bahamas, with a key to related genera.¹ LEONARD P. SCHULTZ, U. S. National Museum.

While looking through Dr. A. E. Parr's publication "Teleostean Shore and Shallowwater Fishes from the Bahamas and Turks Island" (Bull. Bingham Oceanogr. Coll. 3 (4): 60. 1930), I observed that figure 12 did not agree with Poey's figure of his species Inermia vittata from Cuba. Poey's specimens in the national collections confirmed this observation, and upon writing to Dr. Daniel Merriman, director of the Bingham Oceanographic Laboratory, the two specimens on which Parr's figure was based were kindly lent to me for study and description. I am most grateful to Dr. Merriman for the loan of the specimens and for permission to describe them in this paper.

Family EMMELICHTHYIDAE

Before it was possible for me to assign this new genus and new species to any family of fishes, its relationships were compared with several forms that appear related to it. Various authors have placed these genera in the following families: Emmelichthyidae, Centracantidae, Maenidae, Merolepidae, Erythrichthyidae, Dipterygonotidae, and Inermiidae, all of which I propose to unite in the single family Emmelichthyidae, which is defined as follows:

Marine fishes with the body oblong, fusiform, or compressed; mouth oblique, the lower jaw longer than or equal to upper jaw; teeth obsolete, small, or well developed on jaws or vomer, usually lacking on palatines and pterygoids; preopercle entire, with thin membranous posterior border, with or without thin serrae or small spines at least in the young; opercle with or without one or two flat thin spines; premaxillaries greatly protractile, the ascending bony process reaching to orbits or even to rear of orbits, nearly to occiput; gill membranes free from isthmus, extending far forward, with a narrow free fold across isthmus; gills 4, with a slit behind fourth

arch; pseudobranchiae present; lower pharnygeals with teeth; pyloric caeca few; nostrils paired; scales strongly ctenoid, covering, body and head, except snout, lower jaw and sometimes underside of head; a scaly sheath along soft rayed parts of both dorsal and anal fins but no scales, on these fins; caudal fin scaled, deeply forked or emarginate; lateral line continuous, complete, ending on caudal fin, mostly following dorsal contour anteriorly but running along middle of side of caudal peduncle; accessory pelvic scale well developed; pelvics I, 5, thoracic, inserted nearly under base of pectorals, the latter usually with scaly bases; spiny dorsal and soft dorsal continuous or separated, with VIII to XVII spines and 9 to 25 soft rays; anal fin with II or III spines and 8 to 24 rays; all fin spines slender; gill rakers slender, numerous; air bladder present; the maxillary either slips under the preorbital or is almost fully exposed posteriorly; the dentary has a large dorsally projecting leaflike bony lobe posteriorly inside of mouth.

Several genera in this group of fishes have been reviewed in part by other ichthyologists, and the literature has been brought together by them, and so it is not necessary for me to give a complete bibliography.

Dr. Paul Chabanaud published in 1924 a small paper entitled "Remarques sur Dipterygonotus gruveli Chab. et sur la Famille des Dipterygonotidae" (Bull. Soc. Zool. France 49: 248–256) in which he gives a synoptic key to the genera Inermia, Plagiogeneion, Erythrodes, Boxaodon, Emmelichthys, and Dipterygonotus. There follows a section listing the various species under each genus. The next review or analysis of genera was given by Henry W. Fowler (U. S. Nat. Mus. Bull. 100, 12: 344. 1933) under the family name Emmelichthyidae, in which the following genera were recognized: Emmelichthys, Dipterygonotus, Inermia, Erythrodes, Plagiogeneion, and Cypselichthys. A list of species for each genus is given with synonymy. In 1936 three genera belonging in this group of fishes were placed in the family

132

¹ Published by permission of the Secretary of the Smithsonian Institution. Received February 21, 1945.